

December 13, 1961

*File "O" In E.K.*

Dear Milt:

I have missed the opportunity to discuss our mutual headaches during the past several months. As is probably your case, some of our simple problems are being solved and we are still awaiting the full impact of the project thermal environment.

Except for the report of Paul F., we have not received any further comments on the low emissivity coating which we have discussed with you on several occasions and of which we had supplied samples for tests. As you recall, we would be pleased to furnish coatings for you in event of need. Although the Paul F. questions have been answered verbally, I would like to reaffirm the answers to his September inquiry.

1. We are willing and can supply the coatings. This might require a little patience on your part, however, as the coating technique is not perfected to the point where a completely satisfactory coating can be guaranteed for each bell jar set-up.
2. We could not establish a non-covert channel of procurement without jeopardizing our position. Coatings should be scheduled and arranged through me or E.L.G.
3. Reasonable delivery time is a matter of our internal pressure. We would estimate 30 to 60 days if no trouble were experienced.
4. Coatings have been measured for emissivity at operating temperatures. Data is not complete enough to verify or deny other tests. Correlation between low and high operating temperatures has, in our case, been good.
5. We could not forecast lot to lot variation. It is our aim to make identical coatings on a laboratory, non-production type basis. If coatings exceeded tolerances anticipated, we could only strip and re-coat.

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The coating may be basically described on drawing or specification as:

Heat reflecting coating

Visual transmission - greater than 65%.

Electrical conductance - 25 ohms/sq.

IR Transmission at 1.0  $\mu$  - 28-32%.

IR Transmission at 2.0  $\mu$  - 5-10%.

Other pertinent specifications might naturally be initiated by your people.

Best Holiday Greetings to the gang. Will expect to hear from you if you desire any future action.

*JBE*  
B.E.B.

BLE:LB

cc: R.A.G.

E.L.G.

C.F.H.